Claims

1) A system for forming containers, in particular containers (2) for food products, characterized in that it comprises: a feed station (52a) by which a continuous strip (54) of a forming material is directed along a predetermined feed path (Y); a main reel (54a) rotatable about a relative longitudinal axis (X), from which the strip (54) is decoilable along the feed path (Y); a feed station (4) supplying a single file of tubular elements (2a) generated from the strip (54); sealing means (10) operating on a first open end (2b) of each tubular element (2a) in such a way as to enclose the selfsame first end (2b); a conveying mechanism (3) capable of movement between a first operating position of alignment with the feed station (4), from which it receives the tubular elements (2a), and a second operating condition in which the tubular elements (2a) are positioned in alignment with the sealing means (10); and in that the conveying mechanism (3) comprises at least one wheel (11) rotatable in a given feed direction (B) along a sealing path (P) passing adjacent to the feed station (4) and the sealing means (10).

2) A system as in claim 1, wherein the wheel (11) comprises a central hub (12) rotatable about a respective axis (12a), also a plurality of supporting elements (13) projecting radially from the hub (12) and serving to carry the tubular elements (2a), of

which the supporting elements (13) each present a first end (13a) anchored to the hub (12) and a second end (13b) remote from the first end (13a).

3) A system as in claim 2, wherein each supporting element (13) of the wheel presents a substantially parallelepiped shape matched to the internal geometry of the tubular element (2a), in such a way that each tubular element (2a) can be fitted over a respective supporting element (13) with the relative first open end (2b) positioned at the second end (13b) of the supporting element (13).

4) A system as in claim 2, wherein the sealing means (10) comprise: a first joining head (10a) positioned to interact with the first open end (2b) of each tubular element (2) and serving to unite two opposite sides (14) of the tubular element (2a) coinciding with the selfsame first open end (2b); a press (16) operating downstream of the first joining head (10a), relative to the feed direction (B), by which the joined sides (14) are engaged and directed forcibly toward the hub (12) in such a way as to establish a substantially flat base surface (17) of the tubular element (2a) disposed transversely to the longitudinal dimension of the selfsame element (2a) and presenting two end folds (18) projecting laterally from relative opposite side walls of the tubular element (2a); a fixed fold guide (20) positioned along the sealing path (P) and downstream

of the press (16), relative to the feed direction (B), by which the end folds (18) are engaged, bent toward one another and flattened over the joined sides (14); and a second joining head (10b) positioned to interact with and unite the two end folds (18), thereby completing the closure at the relative end of the container (2).

5) A system as in claim 4, wherein the first joining head (10a) comprises two folder elements (15) by which the corresponding sides (14) of the open end (2b) are drawn together and the respective top edges (14a) of the sides matched one to another; also a sealer (15a) operating on the two edges (14a) in such a way as to secure the selfsame edges one to another.

6) A system as in claim 4, further comprising two restraints (19) positioned in alignment with the press (16), between which an advancing supporting element (13) is insertable in such a way that each end fold (18) will locate against a respective restraint (19) under the action of the press (16).

7) A system as in claim 6, further comprising two sealers (19a), each positioned in alignment with a respective restraint (19) and serving to seal the end folds (18).

8) A system as in claim 4, wherein the second joining head (10b) comprises an arm (21) capable of

vertical movement and offered to the flattened end folds (18) at a central point (17a) on the base surface (17).

9) A system as in claim 1, wherein the tubular elements (2a) are prepared by a forming device (5) positioned to coincide with the feed station (4) and comprising: a gripper element (6) such as will bend a blank (7) around a former (8) of shape corresponding to the shape of the tubular element (2a) in such a way that one longitudinal edge of the blank (7) is made to overlap the other; and a feed mechanism (9) by which the tubular element (2a) is advanced along a radial infeed direction (A) toward the conveying mechanism (3).

10) A system as in claim 1, wherein the tubular elements (2a) are prepared by a forming device (5) positioned to coincide with the feed station (4), comprising a gripper element (6) such as will engage the opposite edges of a precreased blank (7) presenting a tubular structure and a substantially flat rhomboidal profile when viewed in section, and thereupon apply a compressive force to the opposite edges such as will cause the flattened profile of the blank (7) to expand to a substantially square profile when viewed in section.